

REMARKS

Claims 1-5, 8-17, 19, 21, and 23-29 are pending. Claims 1, 8, 10, 12-14, and 21 are rejected under 35 U.S.C. § 102(b). Claims 2-5, 9, 11, 16-19, and 23-29 are rejected under 35 U.S.C. § 103(a). Claims 16 and 26 are currently amended. Claims 18 and 31 are cancelled without prejudice. Claim 31 is objected to as being dependent upon a rejected base claim.

Claim 15 depends from claim 1. Examiner has offered no rationale for rejecting claim 15. Thus, applicants request clarification or allowance of claim 15.

Independent claims 1 and 21 are rejected under 35 U.S.C. § 102(b) as being anticipated by Koivu (U.S. Pat. No. 5,737,359). Claim 1 recites “A method for reducing the number of RF channels used in a frequency hopping system having a standard hopping sequence that uses a predetermined number of RF channels, the frequency hopping system including a plurality of communication units amongst which there includes a master unit and one or more slave units, the method comprising the steps of: (a) determining by one of the plurality of communication units if any of the RF channels in the standard hopping sequence are being interfered with; and (b) sending a message by the unit performing step (a) to the one or more other communication unit(s) amongst the plurality which allows them to set up a reduced hopping sequence (RHS) that informs them of **an RF channel in the standard hopping sequence to be removed and replaced with a previous RF channel in the standard hopping sequence.**” (emphasis added).

Claim 21 recites “A method of modifying a standard hopping sequence having a predetermined number of channels, comprising the steps of: determining an interference level of at least one channel of the predetermined number of channels; and sending a message indicating that the at least one channel is to be removed to set up a reduced hopping sequence (RHS) that uses less channels than the standard hopping sequence, wherein the **at least one channel is to be replaced with a previous channel in the standard hopping sequence.**” (emphasis added).

Examiner cites column 5, lines 21-25 as an anticipatory disclosure by Koivu of the foregoing emphasized limitations of claims 1 and 21. Therein, Koivu states in response to a disturbed frequency channel control unit 23 notifies radio unit 25 “of the elimination of one or more channels and/or of their replacement with another frequency channel starting from a given frame.” Koivu discloses two possible actions that may result from such a disturbed frequency channel. The first action is that the disturbed frequency channel is simply eliminated from the frequency hopping pattern. In this case, communication continues on the remaining channels with a reduced frequency hopping pattern. (col. 5, lines 25-28). The second possible action is that the disturbed frequency channel is replaced with “another, previously unused, channel unit which is tuned to another frequency channel.” (col. 4, lines 47-53). Neither these actions nor other disclosure by Koivu suggest that a disturbed channel might be “replaced with a previous RF channel in the standard hopping sequence” as required by claim 1 or “replaced with a previous channel in the standard hopping sequence” as required by claim 21. This embodiment of the present invention advantageously replaces disturbed frequencies in a frequency hopping pattern with previously used frequencies in the frequency hopping pattern as illustrated at Figure 1 of the instant specification. These previously used frequencies are known to be good due to their previous use. This is very different from the disclosure of Koivu where previously unused replacement frequencies may also be disturbed and require yet another replacement frequency. Thus, claims 1 and 21 are patentable under 35 U.S.C. § 102(b) over Koivu. Depending claims 2-5, 8-15, and 23-25 are also patentable as depending from patentable independent claims.

Independent claim 16 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Haartsen (U.S. Pat. No. 6,519,460) in view of Koivu and Sydon et al. (U.S. Pat. No. 6,480,721). Claim 16 is amended to include the limitations of depending claim 18. Claim 18 is cancelled without prejudice. Claim 16, as amended, recites “A Bluetooth system having a standard hopping sequence that includes a predetermined number of RF channels, the Bluetooth system comprising: a master unit; one or more slave units; wherein the master unit determines if any of the predetermined number of RF channels in the standard hopping sequence are being interfered with, and the master unit transmits a message to the one or more slave units informing them to set up a **reduced hopping sequence (RHS) which includes a previously used RF channel in the standard**

hopping sequence to replace an RF channel being interfered with in the standard hopping sequence in order for the master unit and one or more slave units to communicate with each other; and wherein the master unit and one or more slave units have the RF channels which form the standard hopping sequence broken down into a plurality of RF channel groups which are stored in the units and wherein the message transmitted by the master unit informs the one or more slave units which from among the plurality of RF channel groups to use in forming the reduced hopping sequence (RHS).” As previously discussed with regard to claims 1 and 21, the foregoing emphasized limitations are not disclosed by any of the cited references. Examiner attributes this limitation to Haartsen without any corresponding citation. (Office Action 2/22/06, page 7). Applicants fail to find this limitation in Haartsen and believe, therefore, that claim 16 and depending claims 17 and 19 are patentable under 35 U.S.C. § 103(a) over the cited references.

Examiner has objected to claim 31 as being dependent upon a rejected base claim and stated it would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Claim 31 depends directly from independent claim 26. Claim 26 is rewritten to include all the limitations of claim 31. Thus, claim 26 and depending claims 27-29 are patentable under 35 U.S.C. § 103(a) over the cited references.

In view of the foregoing, applicants respectfully request reconsideration and allowance of claims 1-5, 8-17, 19, 21, and 23-29. If the Examiner finds any issue that is unresolved, please call applicants’ attorney by dialing the telephone number printed below.

Respectfully submitted,



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